

PE-CONS No/YY - 2013/0012 (COD)

DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of

on the deployment of alternative fuels infrastructure

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 91 thereof,

Having regard to the proposal from the European Commission¹,

After transmission of the draft legislative act to the national Parliaments,

Having regard to the opinion of the European Economic and Social Committee²,

Having regard to the opinion of the Committee of the Regions³,

Acting in accordance with the ordinary legislative procedure,

¹ OJ C , , p. .

² OJ C , , p. .

³ OJ C , , p. .

Whereas:

- (1) In its Communication "Europe 2020: A strategy for smart, sustainable and inclusive growth"¹ the Commission aims at enhancing competitiveness and energy security by more efficient use of resources and energy.
- (2) The *Commission's* White Paper "Roadmap to a Single European Transport Area – Towards a Competitive and Resource Efficient Transport System"² called for **reducing** the oil dependence of transport. ***This needs to be achieved through an array of policy initiatives, including through the development of*** a sustainable alternative fuels strategy as well as the appropriate infrastructure. The *Commission's* White Paper also **proposed** 60% greenhouse gas (GHG) emissions reduction from transport by **2050, measured against the 1990 levels.**

¹ COM (2010) 2020.

² COM(2011) 144.

- (3) Directive 2009/28/EC of the European Parliament and of the Council of 23/04/2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC¹ set a target of 10% market share of renewables in transport fuels.
- (4) Based on the consultation of stakeholders and national experts, as well as expertise², electricity, hydrogen, biofuels, natural gas, and liquefied petroleum gas (LPG) were identified, ***at the current stage***, as the main alternative fuels with a potential for long-term oil substitution, ***also in light of their possible simultaneous and combined use by means of, for instance, dual-fuel technology systems.***
- (4a) Power sources mean all alternative sources of energy for transport, such as electricity and hydrogen, that do not have to be released through combustion or non-combustion oxidation.***

¹ OJ L 140, 5.6.2009, p. 16.

² COM(2013) 17.

- (4b) *Synthetic fuels, substituting diesel, petrol and jet fuel, can be produced from different feedstock, converting biomass, gas, coal or plastic waste into liquid fuels, methane and Dimethyl ether (DME). Synthetic paraffinic diesel fuels, such as Hydrotreated vegetable oils (HVO), Fischer-Tropsch diesel etc., are fungible and can be blended into fossil diesel fuel at very high blending ratios, or can be used neat in all existing or future diesel vehicles. Therefore, these fuels can be distributed, stored and used with the existing infrastructure. Synthetic fuels substituting petrol, such as Methanol and other alcohols, can be blended with petrol and can be technically used with today's vehicle technology with minor adaptations. Methanol can also be used for waterborne transport for inland as well as for short-sea shipping. Synthetic and paraffinic fuels have a potential to reduce the use of oil sources in the energy supply to transport.*
- (4c) *Liquefied Petroleum Gas (LPG) or autogas is an alternative fuel, deriving from natural gas processing and oil refining, with a lower carbon footprint and significantly reduced pollutant emissions than conventional fuels. Bio-LPG derived from various biomass sources is expected to emerge as a viable technology in the medium to long term. LPG can be used for road transport (for cars and trucks) for all ranges of distances. It can also be used for waterborne transport for inland as well as for short-sea shipping. LPG infrastructure is relatively well-developed with a significant number of filling stations already present in the EU (approximately 29,000), though the distribution of these filling points is uneven, with low penetration in a number of countries.*

- (4d) *Without prejudice to the definition of alternative fuels included in this Directive, it should be noted that there exist further types of clean fuels that can represent potential alternatives to fossil fuels. Promising results from research and development should be considered when new types of alternative fuels are selected. Standards and legislation should be drawn up without giving preference to any particular type of technology, so as not to hamper further development towards alternative fuels and energy carriers.*
- (5) The CARS 21 High Level Group report of 6 June 2012¹ states that the lack of a Union-wide harmonised alternative fuel infrastructure hampers the market introduction of vehicles using alternative fuels and delays their environmental benefits. The Commission Communication on a CARS 2020 Action Plan for the automotive industry in Europe takes up the main recommendations of CARS 21 High Level Group report and presents an Action Plan based on them². This Directive on alternative fuels infrastructure is one of the key actions announced by the Commission.

¹ http://ec.europa.eu/enterprise/sectors/automotive/files/cars-21-final-report-2012_en.pdf.

² COM (2012) 636 final **8.11.2012**.

- (6) Fragmentation of the internal market through uncoordinated market introduction of alternative fuels should be avoided. Coordinated policy frameworks of all Member States should therefore provide the long-term security required for private and public *investment* into vehicle and fuel technology, and infrastructure build-up, *in order to serve the dual purpose of minimising oil dependency and mitigating the environmental impact of transport*. Member States should therefore establish national policy frameworks outlining their *national targets and* objectives, **■** and supporting actions *for* the market development of alternative fuels, including the necessary infrastructure to be put into place, *in close cooperation with regional and local authorities and with the industry concerned, also taking into account the needs of small and medium-sized enterprises (SMEs)*. *Where necessary*, Member States should cooperate with other neighbouring Member States on the regional or macro-regional level, through consultation or joint policy frameworks, in particular where continuity of alternative fuel infrastructure coverage across national borders or construction of new infrastructure in the proximity of national borders is required, *including different non-discriminatory access options for recharging and refuelling points*. A coordination of these national policy frameworks and their coherence at EU level should be *supported through the cooperation between Member States and assessment and reporting by the Commission*. *In order to facilitate reporting by the Member States of the information provided for in Annex I, non binding guidelines should be adopted by the Commission*.

- (6a) A coordinated approach is necessary in order to meet the long-term energy needs of all transport modes. In particular, policies should build on using alternative fuels, with a focus on the specific needs of each transport mode. National policy frameworks should be elaborated taking into account the needs of the different transport modes existing on their territory, including those for which limited alternatives to fossil fuels are available.*
- (6b) The development and implementation of the national policy frameworks of the Member States should be facilitated by the Commission through the exchange of information and best practices between the Member States.*
- (6c) In order to develop infrastructure for alternative fuels and promote alternative fuels, the national policy frameworks may consist of several plans, strategies or other planning documentation developed separately or in an integrated manner, or in other form and at the administrative level as decided by Member States.*

- (7) ***Fuels*** included in the national policy frameworks should be eligible for Union and national support measures for alternative fuels infrastructure in order to focus public support on a co-ordinated internal market development towards Union-wide mobility using alternative fuels vehicles and vessels.
- (7a) ***This Directive is not intended to place an additional financial burden on Member States or regional and local authorities. Member States may implement this Directive making use of a wide range of regulatory and non-regulatory incentives and measures, in close cooperation with private-sector actors, who should play a key role in supporting the development of alternative fuels infrastructure.***

- (7b) *In accordance with Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation (EU) No 913/2010 and repealing Regulations (EC) No 680/2007 and (EC) No 67/2010, the development of new technologies and innovation, in particular regarding the decarbonisation of transport, is eligible for Union funding. That Regulation also provides for additional funding to be granted for actions which exploit the synergies between at least two of the sectors covered by the Regulation (transport, energy and telecommunications). Lastly, the European Commission is assisted by the CEF Coordination Committee to coordinate the work programmes with a view to allowing multi-sectoral calls for proposals in an effort to take full advantage of possible synergies between those sectors. The CEF would therefore contribute to the deployment of alternative fuels infrastructure.***
- (7c) *The Horizon 2020 framework programme will also provide support for research and innovation with regard to alternative-fuel vehicles and the related infrastructure, in particular through the Societal Challenge "Smart, green and integrated transport". This specific source of financing should also contribute to the development of alternative fuels infrastructure and should be fully considered as an additional opportunity to ensure a sustainable mobility market throughout the Union.***

- (7d) *To trigger investments in sustainable transport and support the deployment of a continued network of alternative fuels infrastructure in the European Union, the Commission and the Member States should support national and regional development measures in this area. They should encourage the exchange of best practices in alternative fuels infrastructure deployment and management between local and regional development initiatives and, to this aim, they should promote the use of the European Structural and Investment Funds, in particular the European Regional Development Fund and the Cohesion Fund.***
- (8) Support measures for alternative fuels infrastructure shall be implemented in compliance with the State aid rules contained in TFEU. *Member States may consider it necessary to provide support to operators affected by this Directive in accordance with the applicable State aid rules. Any national support measures for alternative fuel infrastructure notified to the Commission should be assessed without delay.***

(8a) *The TEN-T guidelines recognise that alternative fuels substitute, at least partly, fossil oil sources in the energy supply to transport, contribute to its decarbonisation and enhance the environmental performance of the transport sector. The revised guidelines of the Trans-European Network for Transport (TEN-T) require with regards to new technologies and innovation that the TEN-T shall enable the decarbonisation of all transport modes by stimulating energy efficiency as well as the introduction of alternative propulsion systems and the provision of corresponding infrastructure. The TEN-T guidelines also require that inland and sea ports, airports and roads of the Core Network provide for the availability of alternative clean fuels. In the Connecting Europe Facility (CEF), the TEN-T funding instrument makes eligible for grants the deployment on the Core Network of these new technologies and innovation, including infrastructure for alternative clean fuels. In addition, the deployment of infrastructure for alternative clean fuels on the broader comprehensive network will be able to receive financial assistance from the CEF in the form of procurement and financial instruments, such as project bonds.*

- (9) Biofuels¹, as defined in the Directive 2009/28/EC¹, are currently the most important type of alternative fuels, accounting for 4.7% in EU transport *in 2011*. They can *also* contribute to a substantial reduction in overall CO₂ emissions, if they are produced sustainably¹. They could provide clean power to all *forms* of transport.¹
- (10) The lack of harmonised development of alternative fuels infrastructure across the Union prevents the development of economies of scale on the supply side and EU-wide mobility on the demand side. New infrastructure networks need to be built up, *such as* for electricity,¹ natural gas (LNG and CNG), *and hydrogen, where appropriate. It is important to acknowledge the different stages of development for each fuel technology and related infrastructures, including the maturity of business models for private investors and the availability and customer acceptance of alternative fuels. Technological neutrality should be ensured and national policy frameworks should take due account of the requirement to support the commercial development of alternative fuels. Moreover, population density and geographical characteristics should be taken into account when elaborating national policy frameworks.*

¹ *OJ* L140, 5.6.2009, p. 16.

- (11) Electricity *has the potential to increase the energy efficiency of road vehicles and to contribute to CO₂ reduction in transport. It is a power source indispensable for the deployment of electric vehicles, including L-category vehicles,* which can contribute to improving air quality and reducing noise *in urban/suburban agglomerations and other densely populated areas.* Member States should ensure that recharging points *accessible to the public* are built up with *adequate coverage, in order to enable electric vehicles to circulate at least in urban/suburban agglomerations and other densely populated areas, and, where appropriate, within networks determined by the Member States. The number of those recharging points should be established taking into account the number of electric vehicles estimated to be registered in 2020 in each Member State. As an indication, the appropriate average number of recharging points should be equivalent to at least one recharging point per 10 cars, also taking into consideration the type of cars, charging technology and available private recharging points. An appropriate number of recharging points accessible to the public should be installed,* in particular, *at public transport stations, such as port passenger terminals, airports or railway stations.* Private owners of electric vehicles depend to a large extent on access to recharging points in collective parking lots, such as in *apartment* blocks, office and business locations. *Public* authorities *should take measures to assist vehicle users* by ensuring that the appropriate infrastructure with sufficient electric vehicle recharging points is provided by **█** site developers and managers.

- (11a) Member States should ensure that publicly accessible infrastructure for the supply of electricity to motor vehicles is built up. To define an appropriate number of recharging points accessible to the public in their national policy framework, Member States can take into consideration the number of existing recharging points accessible to the public on their territory and their specifications to decide to concentrate deployment efforts on normal or high power recharging points.***
- (11b) Electro-mobility is a fast developing area. Current recharging interface technologies include cable connectors but future interface technologies such as wireless or battery swapping need to be considered as well. Legislation needs to make sure that technological innovation is facilitated. This Directive should therefore be updated in order to take into account future standards for technologies such as wireless charging and battery swapping.***

(12) When developing infrastructure for electric vehicles the interaction of that infrastructure with the electricity system, as well as the electricity policy of the Union, needs to be taken into account. The establishment and operation of recharging points for electric vehicles should be developed as a competitive market with open access to all parties interested in rolling out or operating recharging infrastructures.

(12a) A recharging or refuelling point accessible to the public may include, for example, privately owned recharging or refuelling points or devices accessible to the public through registration cards or fees, recharging or refuelling points of car sharing schemes which allow access for third party users by means of subscription, or recharging or refuelling points in public parking. Recharging or refuelling points which allow private users to access physically with an authorisation or a subscription should be considered to be recharging or refuelling points accessible to the public.

- (12b) *Electricity and hydrogen are particularly attractive power sources for the deployment of electric/fuel cells vehicles and L-category vehicles in urban/suburban agglomerations and other densely populated areas which can contribute to improving air quality and reducing noise. Electromobility is an important contributor to meet the European Union ambitious climate and energy targets for 2020. Indeed the Directive 2009/28/EC on renewable energy, transposed by Member States by 5 December 2010, sets mandatory targets for all Member States for the share of energy from renewable sources with the aim to reach an EU target of at least 20% share of energy from renewable sources in 2020, and a 10% share of renewable energy specifically in the transport sector in 2020.*
- (13) *Recharging at recharging points should, if technically and financially reasonable, make use of intelligent metering systems in order to contribute to the stability of the electricity system by recharging batteries from the grid at times of low general electricity demand and allow secure and flexible data handling. In the long term this may also enable the electric vehicles to feed power from the batteries back in the grid at times of high general electricity demand. Intelligent metering systems as defined in Article 2 (28) of Directive 2012/27/EU enable real-time data needed to ensure the stability of the grid and to encourage rational use of recharging services. Intelligent metering systems provide accurate and transparent information on the cost and availability of recharging services, encouraging recharging at "off peak" periods which means times of low electricity demand and low energy prices. The use of intelligent metering systems optimises recharging, with benefits for the electricity system and consumers.*

- (14) With respect to recharging points for electric vehicles which are not publicly accessible, Member States should aim to *explore technical and financial feasibility* of synergies with intelligent meter roll-out plans following the obligation under *Annex I.2 of Directive 2009/72/EC*. *Distribution system operators play an important role in relation to recharging points. In the development of their tasks, the distribution system operators, some of whom may be part of a vertically integrated undertaking owning or operating recharging points, should cooperate on a non-discriminatory basis with any other owners and operators of the recharging points, in particular providing them with the information needed for the efficient access to and use of the system.*
- (14a) *When developing infrastructure for electric vehicles the interaction of that infrastructure with the electricity system, as well as the electricity policy of the Union should ensure consistency with the principles established under Directive 2009/72/EC. The establishment and operation of recharging points for electric vehicles should be developed as a competitive market with open access to all parties interested in rolling out or operating recharging infrastructures.*

- (14b) *The access of EU electricity suppliers to recharging points should be without prejudice to the derogations under Article 44 of Directive 2009/72.***
- (15) The Commission delivered in 2010 a Mandate (M468) to the European Standardisation Organisations (ESOs) in order to issue new standards or review the existing ones with the aim of ensuring the interoperability and connectivity between the electricity supply point and the charger of electric vehicles. CEN/CENELEC set up a Focus Group which published a report in October 2011. Whereas the report contains a number of recommendations, no consensus was found to select one standard interface. Therefore, further policy action is needed in order to provide a non-proprietary solution ensuring interoperability across the EU.

- (15a)** *Interface to charge electric vehicles could include several sockets outlets or vehicle connectors as far as one of them complies with Annex III.1.1 and 1.2, so as to allow multistandard recharging. However, the choice for the EU common Type 2 and Combo 2 connectors for electric vehicles should not be detrimental to Members States having already invested in the deployment of other standardised technologies for recharging points and should not affect existing recharging points deployed before the entry into force of this Directive. Electric vehicles already in circulation before the entry into force of this Directive should be able to recharge, even if they were designed to recharge at recharging points that do not comply with the technical specifications set out in this Directive.*
- (15b)** *The choice of equipment for normal and high power recharging points should comply with specific safety requirements in force at national level.*

- (16) Shore-side electricity facilities can serve maritime and inland waterway transport as clean power supply, in particular in maritime and inland navigation ports where air quality or noise levels are poor. *Shore-side electricity can contribute to reducing the environmental impact of sea-going ships and inland waterway vessels.*
- (16a) *Standardisation of shore-side electricity supply should not impede the use of systems already in place prior to the entry into force of this Directive. In particular, Member States should allow maintenance and upgrading of existing systems with a view to ensuring efficient use throughout their lifespan, without requiring full compliance with the technical specifications as set out in this Directive.*
- (16b) *Electricity supply to stationary airplanes at airports can reduce fuel consumption and noise, improve air quality and reduce the impact on climate change. Member States should therefore ensure that the need to install electricity supply at airports is considered in their national policy frameworks.*

- (17) Hydrogen **powered motor** vehicles, including hydrogen powered **L-vehicles**, have at present very low market penetration rates but a build-up of sufficient hydrogen refuelling infrastructure is essential to enable larger-scale hydrogen **powered motor** vehicle deployment.
- (18) Member States, **which decide to include hydrogen refuelling points in their national policy frameworks**, should ensure that publicly accessible infrastructure for the supply of hydrogen to motor vehicles is built up, **ensuring** circulation of hydrogen **powered motor** vehicles within the **networks determined by the Member States**. **Where appropriate, cross-border links should be taken into account with a view to enable hydrogen powered motor** vehicles to circulate Union-wide.

- (19) As far as natural gas vehicles are concerned, around 3,000 refuelling points are in operation in the Union. Additional refuelling points could be put in place and supplied from the existing well developed area covering natural gas distribution network in the Union, provided that the quality of the gas is sufficient for use in current and advanced technology gas vehicles. *The current distribution network for natural gas could be supplemented with local refuelling points utilising locally produced biomethane.*
- (19a) *Common infrastructure for natural gas requires common technical specifications for its hardware as well as for the gas quality. The quality of natural gas used in the Union depends on its origin, its constituents, e.g. biomethane when blended into natural gas, and on the way in which natural gas is handled through the distribution chain. Therefore, a spread of technical characteristics could prevent the optimal use of engines and reduce their energy efficiency. In this respect, the Technical Committee CEN/TC 408 43 is developing a set of quality specifications for natural gas used in transport and for the injection of biomethane into the natural gas grid.*

- (20) Member States should ensure, *through their national policy frameworks, that an appropriate number of* publicly accessible infrastructure for the supply of gaseous Compressed Natural Gas (CNG) *or compressed bio-methane* to motor vehicles is built up, *in order to ensure that CNG motor vehicles can circulate in urban/suburban agglomerations and other densely populated areas as well as throughout the Union, at least along the existing TEN-T Core Network. When establishing their networks for the supply of CNG to motor vehicles, Member States should ensure that refuelling points accessible to the public are put in place, taking into account the minimum range of CNG motor vehicles. As an indication, the necessary average distance* between refuelling points *should be approximately 150 km. To ensure market functioning and interoperability, all CNG refuelling points for motor vehicles should provide gas at a quality that is required for use in current and advanced technology CNG vehicles.*

- (21) Liquefied Natural Gas (LNG) is an attractive fuel alternative for vessels to meet the requirements for decreasing the sulphur content in *marine* fuels in the Sulphur Emission Control Areas, affecting half of the ships sailing in European Short Sea Shipping, as provided for by Directive 2012/33/EU of the European Parliament and of the Council of 21 November 2012¹ amending Council Directive 1999/32/EC as regards the sulphur content of marine fuels¹. A core network of LNG refuelling points *at* maritime and inland *ports* should be available at least by the end of **2025 and 2030 respectively**. ***LNG refuelling points include, inter alia, LNG terminals, tanks, mobile containers, bunker vessels and barges.*** The initial focus on the core network should not rule out that in the longer perspective LNG is also made available at ports outside the core network, in particular those ports that are important for vessels not engaged in transport operations. ***The decision on the location of the LNG refuelling points at ports should be based on cost-benefit analysis, including environmental benefits. Also applicable safety related provisions should be taken into account. The deployment of LNG infrastructure provided for in this Directive should not hamper the development of other potentially upcoming energy-efficient alternative fuels.***

¹ *OJ L 327, 27.12.12, p. 1.*

- (21a) The Commission and the Member States should endeavour to modify the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) to allow large scale carriage of LNG on inland waterways. These amendments should be consequently made applicable to all transport in the territory of the Union by adapting Annex III, Section III.1 of Directive 2008/68/EC on the inland transport of dangerous goods. Directive 2006/87/EC should be amended, where necessary, to allow efficient and safe use of LNG for propulsion of vessels on inland waterways. Proposed amendments shall not be in conflict with the provisions of the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways applicable in the EU territory by virtue of Annex III, Section III.1 of Directive 2008/68/EC.*
- (21b) Member States should ensure an appropriate distribution system between storage stations and LNG refuelling points. As regards road transport, availability and geographical location of loading points for LNG tank vehicles are essential to develop an economically sustainable LNG mobility.*

- (22) LNG, *including liquefied bio-methane*, might also offer a cost-efficient technology for heavy duty vehicles to meet the stringent pollutant emission limits of Euro VI standards¹.
- (23) The *Core Network* established in the Regulation of the European Parliament and of the Council on Union guidelines for the development of the trans-European transport network¹ should be the basis for the deployment of LNG infrastructure as it covers the main traffic flows and allows for network benefits. *When establishing their networks for the supply of LNG to heavy-duty motor vehicles, Member States should ensure that refuelling points accessible to the public are put in place, at least along the existing TEN-T Core Network, within adequate distances taking into account the minimum range of LNG heavy-duty motor vehicles. As an indication, the necessary average distance between refuelling points should be approximately 400 km.*
- (23a) *The deployment of the refuelling points for both LNG and CNG should be adequately coordinated with the implementation of the TEN-T Core Network.*

- (23b) *An appropriate number of LNG and CNG refuelling points accessible to the public should be put in place by 31 December 2025 at the latest, at least along the existing TEN-T Core Network by that date, and subsequently on the other parts of the TEN-T Core Network where made available to circulation.*
- (24) With the increasing diversity in the type of fuels for *motorised* vehicles coupled with on-going growth in the road mobility of citizens across the Union, it is necessary to provide the *vehicle users* with a clear and easy to understand information on the *fuels available at refuelling stations and on the* compatibility of their vehicle with different fuels *or recharging points on the* market of the Union, without prejudice to Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas-oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC¹. *Member States may decide to implement these information measures also for vehicles in circulation.*

- (24a) Simple and easy to compare information on prices of different fuels could be important for vehicle users to better evaluate the relative cost of individual fuels available on the market. Therefore, when displaying fuel prices on a fuel station, in particular for natural gas and hydrogen, unit price comparison to conventional fuels, such as “1 petrol litre equivalent”, may be displayed for information purposes.*
- (24b) In absence of a European standard for a given alternative fuel, Member States should be allowed to use other standards for user information and labelling.*
- (24c) With the increasing diversity in the type of fuels for motorised vehicles, it is necessary to provide the vehicle users with data of the geographic location of the refuelling and recharging points accessible to the public of alternative fuels covered in this Directive. Thus, when companies or internet sites provide this information, it should be accessible in an open and non-discriminatory basis to all users.*

- (24d) *It is of particular importance for fact based policy-making at all levels to collect best practice and coordinated data through monitoring activities, such as the "Clean Vehicle Portal" and the "European Electro-mobility Observatory".***
- (24e) *Key information concerning the availability of recharging and refuelling points and any other information necessary for EU-wide mobility should be included, where applicable, within traffic and travel information services as part of the intelligent transport system (ITS).***

- (25) In order to ensure adaptation of the provisions of this Directive to market development and technical progress, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of the *technical specifications of refuelling and recharging points and relevant standards*.
- (25a) *The International Maritime Organisation (IMO) develops uniform and internationally recognised safety and environmental standards for maritime transport. Conflicts with international standards should be avoided in view of the global nature of maritime transport. Therefore the Union should ensure that technical specifications for maritime transport adopted pursuant to this Directive are consistent with international rules adopted by the IMO.*

- (26) Technical specifications for interoperability of recharging and refuelling points should be specified in European *or* international standards. **The** European standardisation organisations **should adopt** European standards in accordance with Article 10 of Regulation (EU) No 1025/2012 of the European Parliament and of the Council on European Standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Decision 87/95/EEC and Decision No 1673/2006/EC¹, and those standards should be based on current international standards or on-going international standardisation work, where applicable. ■ For standards not yet **adopted**, the work **should** be based on: (i) **ISO TC67/WG10 Standardisation for installations and equipment for liquefied natural gas, and in particular the draft guidelines for systems and installations for supply of LNG as fuel to ships (ISO/DTS 18683) and ii) ISO/TC 252 for CNG and L-CNG refuelling for motor vehicles.** The Commission should be empowered to **update** the references to technical specifications given in European *or international* standards through **delegated acts**.

¹ OJ L 316, 14.11.2012, p. 12.

- (26a) *It is of particular importance that the Commission follow its usual practice and carry out appropriate consultations during its preparatory work, including at expert level in view of the adoption of* delegated acts.
- (27) In the application of the Directive the Commission should consult relevant expert groups, *at least* the European Expert Group on Future Transport Fuels, consisting of experts from industry and civil society, as well as the Joint Expert Group Transport & Environment regrouping experts from the Member States.

- (27a) A group of experts, called the "European Sustainable Shipping Forum (ESSF)" was established by the Commission in order to assist the Commission in implementing the Union's activities in the area of maritime transport sustainability. The sub-group on Marine LNG was set up under the ESSF, with the mandate to propose to ESSF the development of standards or rules for marine LNG as ship fuel covering technical, operational, safety, security, training and environmental aspects of LNG bunkering. Equally, a European Committee for the Creation of Technical Standards ("CESTE") was established to deal with the technical standards in the field of inland navigation. It is of particular importance that the Commission follow its usual practice and carry out consultations with experts, including the ESSF and the CESTE, before adopting delegated acts on requirements on the bunkering of LNG, including the safety aspects related to it.*
- (27b) The Central Commission for the navigation of the Rhine (CCNR) is an international organisation to address all the issues concerning inland navigation. The Danube Commission is an international intergovernmental organisation to provide and develop free navigation on the Danube. It is of particular importance that the Commission follow its usual practice and carry out consultations with experts, including the CCNR and the Danube Commission, before adopting delegated acts on inland navigation.*

- (27c) *When matters relating to this Directive, other than its implementation or infringements, are being examined by experts, thereby acting as expert groups, the European Parliament should receive full information and documentation and, where appropriate, an invitation to attend the relevant meetings.*
- (28) The Commission, when preparing and drawing-up delegated acts, should ensure a simultaneous, timely and appropriate transmission of relevant documents to the European Parliament and the Council.
- (29) In order to ensure uniform conditions for the implementation of this Directive, implementing powers should be conferred on the Commission to lay down common procedures and specifications. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by the Member States of the Commission's exercise of implementing powers¹.

¹ OJ L 55, 28.2.2011, p. 13.

- (29a)** *To ensure that alternative fuels for transport are provided at the quality required for use in current and future technology engines and represent a high level of environmental performance with regard to CO₂ and other pollutant emissions, the Commission should monitor their introduction on the market. To that end, the Commission should, if appropriate, propose the necessary legal measures to ensure a harmonised high level of fuel quality throughout the Union.*
- (29b)** *In order to achieve the broadest possible use of alternative fuels for transport, while ensuring technological neutrality, and promote sustainable electric mobility throughout the Union, the Commission should, if it considers appropriate, take appropriate measures, such as the adoption of an Action Plan for the implementation of the Strategy on Clean Power for Transport. For this purpose, the Commission could take into account individual market needs and development in the Member States.*

- (30) Since the objective of promoting a broad market development of alternative fuels cannot be sufficiently achieved by the Member States individually, but requires action at Union level in order to ensure the demand for a critical mass of these vehicles for cost-efficient developments by European industry and allow Union-wide mobility of alternatively fuelled vehicles, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on the European Union. In accordance with the principle of proportionality as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

HAVE ADOPTED THIS DIRECTIVE :

Article 1

Subject matter

This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to *minimise* the oil dependence *and mitigate the environmental impact* of transport. *This Directive* sets out minimum requirements on alternative fuels infrastructure build *up, to be implemented through Member States' national policy frameworks, including* common technical specifications *for* recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, *and user information requirements*.

Article 2
Definitions

For the purpose of this Directive, the following definitions shall apply :

- (1) **"Alternative fuels" means fuels or power sources which serve, at least partly, as a substitute for fossil oil sources in the energy supply to transport and which have a potential to contribute to its decarbonisation and enhance the environmental performance of the transport sector. They include, inter alia:**
- electricity,
 - hydrogen,
 - biofuels as defined in Directive 2009/28/EC of the European Parliament and the Council,
 - synthetic **and paraffinic** fuels,
 - natural gas, including biomethane, in gaseous form (Compressed Natural Gas – CNG) and liquefied form (Liquefied Natural Gas - LNG), and
 - Liquefied Petroleum Gas (LPG).

- (2) "Recharging point" means *an interface, able to charge one electric vehicle at a time or exchange* ■ a battery of *one* electric vehicle *at a time*.
- (3) "*Normal power* recharging point" means a recharging point that allows for a *transfer* of electricity to an electric vehicle with a power of *equal or less than* ■ 22 kW, *excluding devices with a power of less or equal to 3,7 kW, which are installed in private households or whose primary purpose is not recharging electric vehicles, and which are not accessible to the public*.
- (4) "*High power* recharging point" means a recharging point that allows for a *transfer* of electricity to an electric vehicle with a power ■ more than 22 kW.
- (5) "*Recharging* or refuelling point *accessible to the public*" means a recharging or refuelling point *to supply an alternative fuel* which provides *Union-wide* non-discriminatory access to the users. *Non-discriminatory access may include different terms of authentication, use and payment*.

- (6) "Electric vehicle" means a *motor vehicle equipped with a powertrain containing at least one non-peripheral electric machine as energy converter with an electric rechargeable energy storage system, which can be recharged externally.*
- (7) "*Refuelling* point" means a *refuelling facility for the* provision of any fuel with *the* exception of LNG, through a *fixed or a mobile installation.*
- (8) "*Refuelling* point for LNG" means a *refuelling facility for the* provision of LNG, *consisting of* either ■ *fixed or mobile facility, offshore facility, or other systems.*
- (9) "*Shore-side electricity supply*" is *the provision of shore side electrical power to the sea-going ships or inland waterway vessels at berth, provided through a standardised interface.*

Article 3

National policy frameworks

1. Each Member State shall adopt a national policy framework for the market development of alternative fuels *in the transport sector and the deployment of the relevant* infrastructure.

It shall contain at least the following elements:

- assessment of **█** state and future development of *the market of alternative fuels in the transport sector, also in light of their possible simultaneous and combined use, and of the development of alternative fuels infrastructure, considering, where available, cross-border continuity;*

█

- *national targets and objectives, pursuant to Articles 4(1), 4(2a), 4(4), 6(1), 6(2), 6(2a), 6(3), 6(3b), 6(6), 6(6a) and, where applicable 5(1), for the deployment of alternative fuels infrastructure. Those national targets and objectives shall be established and may be revised on the basis of an assessment of national, regional or Union-wide demand, while ensuring compliance with the minimum infrastructure requirements set out in this Directive;*

- *measures necessary to ensure that the national targets and the objectives contained in their national policy framework are reached;*
- *measures that can promote the deployment of alternative fuels infrastructure in public transport services;*
- *designation of the urban/suburban agglomerations, other densely populated areas and networks, which, subject to market needs, will be equipped with recharging points accessible to the public in accordance with Article 4(1);*
- *designation of the urban/suburban agglomerations, other densely populated areas and networks, which, subject to market needs, will be equipped with CNG refuelling points in accordance with Article 6(6);*

- *assessment of the need to install LNG refuelling points in ports outside the TEN-T Core Network;*
- *consideration of the need to install electricity supply at airports for use by stationary airplanes.*

1a. Member States shall ensure that national policy frameworks take into account the needs of the different transport modes existing on their territory, including those for which limited alternatives to fossil fuels are available.

1b. National policy frameworks shall take into account, as appropriate, the interests of regional and local authorities, as well as those of stakeholders concerned.

2. ***Where necessary***, Member States shall cooperate, through consultations or joint policy frameworks, to ensure that the measures required to achieve the objectives of this Directive are coherent and coordinated.

4. Support measures for alternative fuels infrastructure shall be implemented in compliance with the State aid rules contained in TFEU.

4a. ***The national policy frameworks shall be in line with the Union's environmental and climate-protection legislation in force.***

5. Member States shall notify their national policy frameworks to the Commission [within **24** months from the date of entry into force of this Directive].

5a. Based on the national policy frameworks, the Commission shall publish and update regularly information on the national targets and the objectives submitted by each Member State regarding:

- number of recharging points accessible to the public;**
- refuelling points for LNG at maritime and inland ports;**
- refuelling points for LNG accessible to the public for motor vehicles;**
- CNG refuelling points accessible to the public for motor vehicles;**

Where applicable, the following information shall also be published regarding:

- *hydrogen refuelling points accessible to the public;*
- *infrastructure for shore-side electricity supply in maritime and inland ports;*
- *infrastructure for electricity supply for stationary aircraft.*

6. The Commission shall *assist Member States in the reporting on* the national policy frameworks *by means of guidelines referred to in Article 10(3), assess their coherence at EU level and assist Member States in the cooperation process set out in paragraph 2.*

█

Article 4

Electricity supply for transport

1. Member States shall ensure, *through their national policy frameworks*, that *an appropriate number of recharging points accessible to the public are put in place by 31 December 2020, in order to ensure that electric vehicles can circulate at least in urban/suburban agglomerations and other densely populated areas, and, where appropriate, within networks determined by the Member States. The number of these recharging points shall be established taking into consideration inter alia the number of electric vehicles estimated to be registered in 2020, set out in their national policy frameworks, as well as best practices and recommendations issued by the Commission. Particular needs related to the installation of recharging points accessible to the public at public transport stations shall be taken into account, where appropriate.*

2. *The Commission shall assess the application of the provisions in paragraph 1 and, as appropriate, present a proposal to modify this Directive, taking into account the development of the electric vehicle market, in order to ensure that an additional number of recharging points accessible to the public are put in place in each Member State by 31 December 2025 at the latest, at least on the TEN-T Core Network, in urban/suburban agglomerations and other densely populated areas.*
- 2a. *Member States shall also take measures within their national policy frameworks to encourage and facilitate the deployment of recharging points not accessible to the public.*

3. *Member States shall ensure that normal power recharging points for electric vehicles, excluding wireless or inductive units, deployed or renewed as from [36 months from the date of entry into force of this Directive] comply at least with the technical specifications set out in Annex III.1.1 and with specific safety requirements in force at national level.*

Member States shall ensure that high power recharging points for electric vehicles, excluding wireless or inductive units, deployed or renewed as from [36 months from the date of entry into force of this Directive] comply at least with the technical specifications set out in Annex III.1.2.

█

4. Member States shall ensure that *the need for* shore-side electricity supply for *inland waterway vessels and sea-going ships in maritime and inland ports is assessed in their national policy frameworks. Such shore-side electricity supply shall be installed as a priority in ports of the TEN-T Core Network, and in other ports, by 31 December 2025, unless there is no demand* and the costs are disproportionate to the benefits, including environmental benefits.
5. *Member States shall ensure that shore-side electricity supply installations* for maritime and inland waterway transport *deployed or renewed as from [36 months from the date of entry into force of this Directive]* comply with the technical specifications set out in Annex III.1.3.

6. ***Recharging at*** recharging points ***accessible to the public*** for electric vehicles shall, ***if technically feasible and economically reasonable, make use of*** intelligent metering systems as defined in Article 2(28) of Directive 2012/27/EU and respect the requirements laid down in Article 9(2) of that Directive.

8. Member States shall ***ensure that operators of recharging points accessible to the public are free to purchase electricity from any EU electricity supplier, subject to the supplier's agreement. The operators of recharging points shall be allowed to provide electric vehicle recharging services to customers on a contractual basis, including in the name and on behalf of other service providers.***

8a. ***All recharging points accessible to the public shall also provide for ad-hoc charging possibility to electric vehicle users without entering in a contract with the electricity supplier or operator concerned.***

- 8b.** Member States shall ensure that *prices charged by the operators of recharging points accessible to the public are reasonable, easily and clearly comparable, transparent and non-discriminatory.*
9. Member States shall ensure that distribution system operators cooperate on a non-discriminatory basis with any person *which establishes or operates recharging points accessible to the public.*
10. Member States shall ensure that *the legal framework allows that electricity supply for a recharging point can be contracted with other suppliers than the supplier of the household or premises where these recharging points are located.*
- 10a.** *Without prejudice to Regulation (EU) No 1025/2012, the Union shall pursue the development by the appropriate standardisation organisations of European standards containing detailed technical specifications for wireless charging and exchange of batteries for motor vehicles, and for recharging points for L-category motor vehicles and electric buses.*

11. The Commission shall be empowered to adopt delegated acts in accordance with Article 8 to:

- (a) supplement this Article and Annex III. points 1.2a, 1.2b. 1.2c and 1.2d in order to require compliance, by the infrastructures to be deployed or renewed, with the technical specifications for wireless charging, exchange of batteries, recharging points for L-category motor vehicles and recharging points for electric buses contained in the European standards to be developed pursuant to paragraph 10a, where the relevant European Standardisation Organisations have recommended only one technical solution with technical specifications as described in a relevant European standard.*
- (b) update the references to the standards referred to in the technical specifications set out in Annex III.1 where these standards are replaced by new versions thereof adopted by the relevant standardisation organisations.*

It is of particular importance that the Commission follow its usual practice and carry out consultations with experts, including Member States' experts, before adopting those delegated acts.

These delegated acts shall provide for transitional periods of at least [24] months before the concerned technical specifications or their amended versions become binding on infrastructure to be deployed or renewed.

Article 5

Hydrogen supply for *road* transport

1. *Those* Member States *which decide to include hydrogen refuelling points accessible to the public in their national policy framework* shall ensure that *an appropriate number of such points are available to ensure the circulation of hydrogen powered motor vehicles, including fuel cell vehicles, within networks determined by those Member States, including cross-border links where appropriate, by 31 December 2025* at the latest.
2. Member States shall ensure that *hydrogen refuelling points accessible to the public deployed or renewed as from [36 months from the date of entry into force of this Directive] comply with the technical specifications set out in Annex III.2.*

3. *The Commission shall be empowered to adopt delegated acts in accordance with Article 8 to update the references to the standards referred to in the technical specifications set out in Annex III.2 where these standards are replaced by new versions thereof adopted by the relevant standardisation organisations.*

It is of particular importance that the Commission follow its usual practice and carry out consultations with experts, including Member States' experts, before adopting those delegated acts.

These delegated acts shall provide for transitional periods of at least [24] months before the concerned technical specifications or their amended versions become binding on infrastructure to be deployed or renewed.

Article 6

Natural gas supply for transport

- 1. Member States shall ensure, through their national policy frameworks, that an appropriate number of refuelling points for LNG are put in place at maritime ports to enable LNG inland waterway vessels or sea-going ships to circulate throughout the TEN-T Core Network by 31 December 2025 at the latest. Member States shall co-operate with neighbouring Member States where necessary to ensure adequate coverage of the network.*

- 2. Member States shall ensure, through their national policy frameworks, that an appropriate number of refuelling points for LNG are put in place at inland ports to enable LNG inland waterway vessels or sea-going ships to circulate throughout the TEN-T Core Network by 31 December 2030 at the latest. Member States shall co-operate with neighbouring Member States where necessary to ensure adequate coverage of the network.*

- 2a.** *Member States shall designate in their national policy frameworks the maritime and inland ports that shall provide access to refuelling points for LNG pursuant to paragraphs 1 and 2, also taking into consideration actual market needs.*
- 3.** *Member States shall ensure, through their national policy frameworks, that an appropriate number of LNG refuelling points accessible to the public are put in place by 31 December 2025 at the latest, at least along the existing TEN-T Core Network, in order to ensure that LNG heavy-duty motor vehicles can circulate throughout the Union, where there is demand, unless the costs are disproportionate to the benefits, including environmental benefits.*
- 3a.** *The Commission shall assess the application of the provisions in paragraph 3 and, as appropriate, present a proposal to modify this Directive by 31 December 2027 at the latest, taking into account the LNG heavy-duty motor vehicles market, in order to ensure that an appropriate number of LNG refuelling points accessible to the public are put in place in each Member State.*

3b. *Member States shall ensure in their territory an appropriate distribution system for LNG supply, including loading facilities for LNG tank vehicles, for refuelling points referred to in paragraph 1, 2 and 3. By way of derogation, neighbouring Member States, in the context of their national policy framework, may form a pool for the purposes of fulfilling the present provision. These agreements will be subject of the reporting obligations of the Member States, deriving of the provisions of the present Directive.*

6. Member States shall ensure, *through their national policy frameworks*, that an *appropriate* number of CNG refuelling points accessible to the public are put in place by 31 December 2020, in order to ensure, in line with Article 3(1) indent 6, that CNG motor vehicles can circulate **■** in urban/suburban agglomerations and other densely populated areas, and, where appropriate, within networks determined by the Member States.

6a. *Member States shall ensure, through their national policy frameworks, that an appropriate number of CNG refuelling points accessible to the public are put in place by 31 December 2025 at the latest, at least along the existing TEN-T Core Network, to ensure that CNG motor vehicles can circulate throughout the Union.*

7. ***Member States shall ensure that*** CNG refuelling points for motor vehicles ***deployed or renewed [36 months from the date of entry into force of this Directive]*** comply with the technical specifications set out in Annex III.3.3.1.

I

8a. ***Without prejudice to Regulation (EU) No 1025/2012, the Union shall pursue the development by the relevant European or international standardisation organisations of:***

- (a) a standard, including detailed technical specifications, for refuelling points for LNG for maritime and inland waterway transport,***
- (b) a standard, including detailed technical specifications, for refuelling points for LNG and CNG motor vehicles.***

9. The Commission shall be empowered to adopt delegated acts in accordance with Article 8 to:

- (a) supplement this Article and Annex III points 3.1, 3.2 and 3.3a, in order to require compliance, by the infrastructures to be deployed or renewed, with the technical specifications contained in the standards to be developed pursuant to paragraph 8a, points (a) and (b) where the relevant European Standardisation Organisations have recommended only one technical solution with technical specifications as described in a relevant European standard, if applicable, compatible with the relevant international standards.*
- (b) update the references to the standards referred to in the technical specifications set out or to be set out in Annex III.3 where these standards are replaced by new versions thereof adopted by the relevant European or international standardisation organisations.*

It is of particular importance that the Commission follow its usual practice and carry out consultations with experts, including Member States' experts, before adopting those delegated acts.

These delegated acts shall provide for transitional periods of at least [24] months before the concerned technical specifications or their amended versions become binding on infrastructure to be deployed or renewed.

10. ***In the absence of a standard, including detailed technical specifications for ■ refuelling points for LNG for maritime and inland waterway transport, referred to in paragraph 8a (a), and in particular in the absence of those specifications related to bunkering of LNG, the Commission, taking into account the work ongoing at the IMO, CCNR, the Danube Commission and other relevant international fora, shall be empowered to adopt delegated acts in accordance with Article 8 to lay down:***

- ***requirements for interfaces of bunker transfer of LNG in maritime and inland waterway transport,***
- ***requirements related to safety aspects of the onshore storage and bunkering procedure of LNG in maritime and inland waterway transport.***

It is of particular importance that the Commission follow its usual practice and carry out consultations with relevant groups of experts on maritime transport and experts on inland waterways transport, including experts from national maritime or inland navigation authorities, before adopting those delegated acts.

Article 7

User information

1. Without prejudice to Directive 2009/30/EC, Member States shall ensure that relevant, ***consistent and clear information is made available as to which motor vehicles can be regularly fuelled with individual fuels put on the market or recharged by recharging points. Such information shall be made available in motor vehicle manuals, at refuelling and recharging points, on motor vehicles and motor vehicle dealerships in their territory. This applies to motor vehicles and motor vehicle manuals when those motor vehicles are put on the market after [the date of the transposition of this Directive].***

2. The *provision of* information **■** referred to in paragraph *1* shall be based *on the* labelling *provisions regarding fuel compliance under standards of the European Standardisation Organisations setting the technical specifications of fuels. Where such standards refer to a graphical expression, including a colour coding scheme, the graphical expression shall be simple and easy to understand, and it shall be placed in a clearly visible manner:*
- (a) on corresponding pumps and their nozzles at all refuelling points, from the moment fuels are put on the market;*
 - (b) on or in the immediate proximity of all fuel tanks' filling caps of motor vehicles recommended and compatible with that fuel and in motor vehicle manuals, when those motor vehicles are put on the market after [the date of the transposition of this Directive].*

3a. *Where appropriate, when displaying fuel prices at a fuel station, in particular for natural gas and hydrogen, comparison between the relevant unit prices shall be displayed for information purposes. Display of this information shall not mislead or confuse the user.*

In order to increase consumer awareness and provide for fuel price transparency in a consistent way across the Union, the Commission shall be empowered to adopt, by means of implementing acts, a common methodology for alternative fuels unit price comparison.

4. *Where European Standardisation Organisations' standards setting technical specifications of a fuel do not include labelling provisions for compliance with the standards or if the labelling provisions do not refer to a graphical expression including colour coding schemes, or if the labelling provisions are not suitable for reaching the objectives of this Directive, the Commission may, for the purposes of the uniform implementation of paragraphs 1 and 2, mandate European Standardisation Organisations to develop compatibility labelling specifications or adopt implementing acts* determining the *graphical expression, including a colour coding scheme, of compatibility* for fuels introduced in the Union market and reaching the level of 1% of the total volume of sales, in the assessment of the Commission, in more than one Member State.

- 4a. *If labelling provisions of the respective CEN standards are updated, implementing acts regarding the labelling are adopted or new CEN standards for alternative fuels are developed if necessary, the corresponding labelling requirements shall apply to all refuelling and recharging points and motor vehicles registered on the territory of the Member States [24] months after their respective adoption.***
- 5. The implementing acts referred to in the present Article shall be adopted in accordance with the procedure referred to in Article 9(2).**
- 6. *Member States shall ensure that, when available, the data of the geographic location of the refuelling and recharging points accessible to the public of alternative fuels covered in this Directive is accessible in an open and non-discriminatory basis to all users. For recharging points, the data, when available, may include information on real-time accessibility as well as historical and real-time charging information.***

Article 8

Exercise of the delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The delegation of power referred to in Articles 4, 5 and 6 shall be conferred on the Commission for *a period of five years from [the date of entry into force of this Directive]. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.*

3. The delegation of power referred in Articles 4, 5 and 6 may be revoked at any time by the European Parliament or by the Council. A decision of revocation shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
5. A delegated act adopted pursuant to Articles 4, 5 and 6 shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by three months at the initiative of the European Parliament or of the Council.

Article 9
Committee

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. Where reference is made to this paragraph, Article **5 of Regulation (EU) No 182/2011 shall apply. Where the Committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4)** of Regulation (EU) No 182/2011 shall apply.
3. Where the opinion of the committee is to be obtained by written procedure, that procedure shall be terminated without result when, within the time-limit for delivery of the opinion, the chair of the committee so decides or a simple majority of committee members so request.

Article 10

Reporting and review

1. Each Member State shall submit **■** to the Commission *a report* on the *implementation of its* national policy framework [*three* years after the *deadline of notification set in Article 3(5)*], and every *three* years thereafter. *Those* reports shall *cover the* information set out in Annex I *and shall, where appropriate, include a relevant justification regarding the level of attainment of the national targets and objectives referred to in Article 3(1)*.
- 1a. *Within one year from the [deadline of notification set in Article 3(5)], the Commission shall submit to the European Parliament and the Council a report on the assessment of the national policy frameworks and their coherence at Union level, including an evaluation of the level of attainment of the national targets and objectives referred to in Article 3(1)*.

2. The Commission shall submit a report on the application of this Directive to the European Parliament and the Council every *three* years with effect from [*four* years after the transposition date of this Directive].

The Commission report shall contain the following elements:

- the assessment of the actions taken by Member *States*;
- the assessment of the effects of this Directive on the market development of alternative fuels *infrastructure* and *its contribution to the market of alternative fuels for transport as well as its* impact on *the* economy and *the* environment;

- information on technical progress and market development of the alternative fuels ***in the transport sector and the relevant infrastructure*** covered by this Directive and of any other alternative fuel.

The Commission may ***outline examples of best practice and make appropriate recommendations***.

The Commission report shall ***also*** assess the requirements and the dates set out in this Directive in respect to the infrastructure build-up and implementation of specifications, taking into account the technical, economic and market developments of the respective alternative fuels, accompanied if appropriate by a legislative proposal.

3. *The Commission shall adopt guidelines concerning the reporting by the Member States of the elements provided for in Annex I.*
4. *By 31 December 2020 at the latest, the Commission shall review the implementation of this Directive, and as appropriate present a proposal to modify it with new common technical specifications for alternative fuels infrastructure under the scope of this Directive.*
5. *By 31 December 2018, the Commission shall, if it considers appropriate, adopt an Action Plan for the implementation of the "Strategy on Clean Power for Transport" (COM (2013)0017) in order to achieve the broadest possible use of alternative fuels for transport, while ensuring technological neutrality, and promote sustainable electric mobility throughout the Union. For this purpose, it may take into account individual market needs and developments in the Member States.*

Article 11
Transposition

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by [24 months from the date of the entry into force of this Directive]. They shall forthwith inform the Commission thereof.
2. When Member States adopt those provisions, they shall contain a reference to this Directive, or be accompanied by such a reference on the occasion of their official publication. The methods of making such reference shall be laid down by Member States.
3. Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

Article 12

Entry into force

This Directive shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

Article 13

Addressees

This Directive is addressed to the Member States.

Done at Brussels,

For the European Parliament For the Council

The President The President

ANNEX I

Report

The *report* shall contain *a description of the measures undertaken in a Member State in support of alternative fuels infrastructure build-up. This report shall include* at least the **█** elements **█** *listed below.*

1. *Legal measures*

Information on legal measures, which may consist of legislative, regulatory and administrative measures to support the build up of alternative fuels infrastructure, such as building permits, parking lots permits, environmental performance of businesses certification, fuel stations concessions.

2. Policy measures supporting the implementation of the national policy framework

Information on these measures shall include **█** the following elements :

- Direct incentives for purchase of **█** means of transport *using alternative fuels* or building of the infrastructure;

- *Availability* of tax incentives to promote **■** means of transport *using alternative fuels* and infrastructure;
- Use of public procurement in support of alternative fuels, including joint procurement;
- Demand side non-financial incentives: e.g. preferential access to restricted areas, parking policy, dedicated lanes;
- *Consideration of the need for renewable jet fuel refuelling points in airports in the TEN-T Core Network;*
- *Technical and administrative procedures and legislation with regard to the authorisation of alternative fuels supply, in order to facilitate the process.*

3. Deployment and manufacturing support

Yearly public budget allocated for alternative fuels infrastructure deployment, differentiated by *alternative* fuel and transport mode (road, rail, water and air).

Yearly public budget allocated to support manufacturing plants for alternative fuels technologies, differentiated by *alternative* fuel and transport mode.

Consideration of any particular needs during the initial phase of the deployment of alternative fuels infrastructures.

4. Research, technological development and demonstration

Yearly public budget allocated to support alternative fuels RTD&D, differentiated by fuel and transport mode.

5. Targets *and objectives*

- *estimation of the number of alternative fuel vehicles expected by 2020, 2025 and 2030;*
- *level of achieving the national objectives for the deployment of alternative fuels in the different transport modes (road, rail, water and air) ;*
- *level of achieving the national targets, year by year, for the deployment of alternative fuels infrastructure in the different transport modes ;*
- *information on methodology applied to take account of charging efficiency of high power recharging points.*

5a. *Alternative fuels infrastructure developments*

Changes in supply (additional infrastructure capacity) and demand (capacity actually used).

I

ANNEX III

Technical specifications

1. Technical specifications for ■ recharging points

1.1 Normal power recharging points for motor vehicles

Alternate Current (AC) normal power recharging points for electric vehicles shall be equipped, for interoperability purposes, at least with socket outlets or vehicle connectors of Type 2 as described in standard EN62196-2■ . Maintaining the Type 2 compatibility, these socket outlets may be equipped with features such as mechanical shutters.

1.2 High power recharging points for motor vehicles

Alternate Current (AC) high power recharging points for electric vehicles shall be equipped, for interoperability purposes, at least with connectors of Type 2 as described in standard EN62196-2.

Direct Current (DC) **high power** recharging points for electric vehicles shall be equipped, for interoperability purposes, **at least** with connectors of Type "Combo 2" as described in **standard EN62196-3.**

1.2a Wireless recharging points for motor vehicles

1.2b Battery exchange for motor vehicles

1.2c *Recharging points for L-category motor vehicles*

1.2d *Recharging points for electric buses*

1.3 Shore-side electricity supply for *inland waterway vessels or sea-going ships*

Shore-side electricity supply for inland waterway vessels or sea-going ships, including the design, installation and testing of the systems, shall comply with the **■** technical specifications of the IEC/ISO/IEEE 80005-1 standard.

2. Technical specifications for hydrogen refuelling points for motor vehicles

- 2.1. Outdoor hydrogen refuelling points dispensing gaseous hydrogen used as fuel on board *motor* vehicles shall comply with the technical specifications of the ISO/TS 20100 Gaseous Hydrogen Fuelling specification.
- 2.2. The hydrogen purity dispensed by hydrogen refuelling points shall comply with the *technical specifications* included in the ISO 14687-2 standard.
- 2.3. Hydrogen refuelling points shall employ fuelling algorithms and equipment complying with the ISO/TS 20100 Gaseous Hydrogen *Fuelling specification*.
- 2.4. Connectors for *motor* vehicles for the refuelling of gaseous hydrogen shall comply with the ISO 17268 gaseous hydrogen *motor* vehicle refuelling connection devices standard.

3. Technical specifications for natural gas refuelling points

3.1. Technical specifications for *refuelling points for* Liquefied Natural Gas (LNG) *for inland waterway vessels or sea-going ships*

█

3.2. Technical specifications for *refuelling points for* Liquefied Natural Gas (LNG) █ for motor vehicles

█

3.3. Technical specifications for Compressed Natural Gas (CNG) *connectors/receptacles*

█ CNG connectors/receptacles shall comply with UN ECE Regulation 110 (referring to ISO 14469, parts I and II).

3.3a Technical specifications for *Compressed Natural Gas (CNG) refuelling points for motor vehicles*

█
